

## INTISARI

Senyawa antioksidan merupakan senyawa yang berperan penting dalam mengurangi efek dari radikal bebas. Umumnya antioksidan diperoleh untuk tubuh dalam bentuk suplemen antioksidan yang berasal dari makanan yang kaya akan antioksidan yang umumnya diperoleh dari mengkonsumsi produk baik dari tumbuhan maupun hewan seperti susu. Namun kandungan, kadar serta total aktivitas antioksidan dapat berbeda antar spesies hewan perah. Penelitian ini bertujuan untuk mengetahui perbandingan kandungan, kadar, dan total aktivitas antioksidan yang ada pada susu sapi dan kambing.

Penelitian ini disajikan dalam bentuk *narrative review*. Literatur diinklusi dengan kriteria rancangan kohort, potong lintang, dan laporan kasus. Pencarian literatur dilakukan menggunakan *database* daring meliputi GoogleScholar dan PubMed. Total aktivitas antioksidan diukur dari hasil pengukuran dengan metode DPPH.

Pada kadar senyawa antioksidan berupa asam amino, vitamin dan mineral lebih tinggi pada susu kambing dibandingkan pada susu sapi. Sedangkan susu sapi memiliki kadar mineral prooksidan lebih tinggi dibandingkan susu kambing. Pada pengukuran TAA dengan menggunakan metode ABTS susu kambing memiliki TAA sebesar  $7.25\mu\text{mol TE/mL}$  dibandingkan dengan susu sapi sebesar  $2.53\pm 0.21\mu\text{mol TE/mL}$ . selain itu pada pengukuran TAA dengan menggunakan metode DPPH, susu kambing memiliki nilai reduksi terbesar yaitu  $54.0\pm 1.02\%$  reduksi DPPH dibandingkan susu sapi dengan nilai terbesar  $38.7\pm 1.53\%$  reduksi DPPH.

**Kata Kunci: Kandungan Antioksidan, Kadar Antioksidan, Total Aktivitas Antioksidan, Susu Sapi, Susu Kambing**

## ***ABSTRACT***

*Antioxidant compounds are compounds that play an important role in reducing the effects of free radicals. Generally, antioxidants are obtained for the body in the form of antioxidant supplements which come from foods rich in antioxidants which are generally obtained from consuming products from both plants and animals such as milk. However, the content, levels and total antioxidant activity can differ between dairy animal species. This study aims to determine the comparison of content, levels and total antioxidant activity in cow and goat milk.*

*This research is presented in the form of a narrative review. Literature was included with the criteria of cohort design, cross-sectional design, and case reports. A literature search was carried out using online databases including GoogleScholar and PubMed. Total antioxidant activity was measured from the results of measurements using the DPPH method.*

*The levels of antioxidant compounds in the form of amino acids, vitamins and minerals are higher in goat's milk than in cow's milk. Meanwhile, cow's milk has higher levels of prooxidant minerals than goat's milk. When measuring TAA using the ABTS method, goat's milk had a TAA of  $7.25\mu\text{mol TE/mL}$  compared to cow's milk of  $2.53\pm 0.21\mu\text{mol TE/mL}$ . Apart from that, when measuring TAA using the DPPH method, goat's milk had the largest reduction value, namely  $54.0 \pm 1.02\%$  DPPH reduction compared to cow's milk with the largest value of  $38.7 \pm 1.53\%$  DPPH reduction.*

**Keywords:** *antioxidant contents, antioxidant levels, total antioxidant activity, cow milk, goat milk*